

Welcome to the presentation on Basic Design Elements for Letters and Cards.

Mail Entry & Payment Technology

Agenda

- Determining Mailability
 - Processing Categories - Letters
 - Machinable/Automation Letters
 - Barcode Readability Basics
 - Postcards

Here is our agenda for this presentation:

- Determine if the part can be mailed
- Processing categories: letters
- Requirements for machinable or automated letters
- Bar code readability basics
- Postcards (mailed cards with price of the First-Class card)

We will begin with an overview of how to determine if a piece can be mailed.

Determining Mailability

All mailpieces that are 1/4" thick or less must be:

- Rectangular in shape
- At least 3 1/2" high
- At least 5" long
- At least .007" thick

Put the
Address
IN!

Exceptions: Customized MarketMail, keys and identification devices



To determine if a piece can be mailed, start with pieces that are a quarter inch thick or less. These pieces should be rectangular, at least 3½ inches high, at least 5 inches long, and at least .007 inches thick. The location of the delivery address is what is used to determine the length and height of the part to determine if it can be mailed. The exceptions to this rule are "Customized Market Mail", keys and identification devices.

Determining Mailability – Rectangular Shape

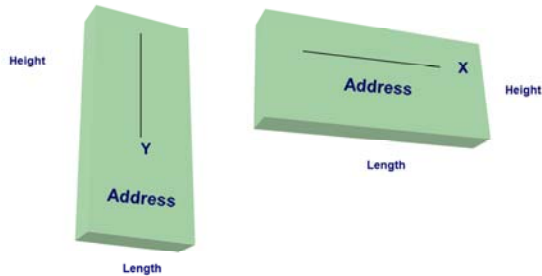
- ❑ Rectangular in shape does prohibit some creative designs for letters and cards
- ❑ Letter-size mailpieces made of cardstock may have finished corners that do not exceed a radius of 0.125"
- ❑ Rectangular in shape means that the opposite sides of a mailpiece must be equal in length and meet at right angles
- ❑ Square mailpieces are mailable

The requirement that the pieces be rectangular in shape prohibits some creative designs for letters and cards. Letter size pieces made of card stock are allowed to have finished corners not exceeding a 0.125 "radius. Rectangular shape means that opposite sides of a postal item must be equal in length and meet at right angles. Square pieces meet this requirement and can be mailed. Remember that here we are talking about the determination that they can be mailed, we are not talking about prices.

Determining Mailability

Orientation of the address on the mailpiece determines height and length

The length is the dimension parallel to the address



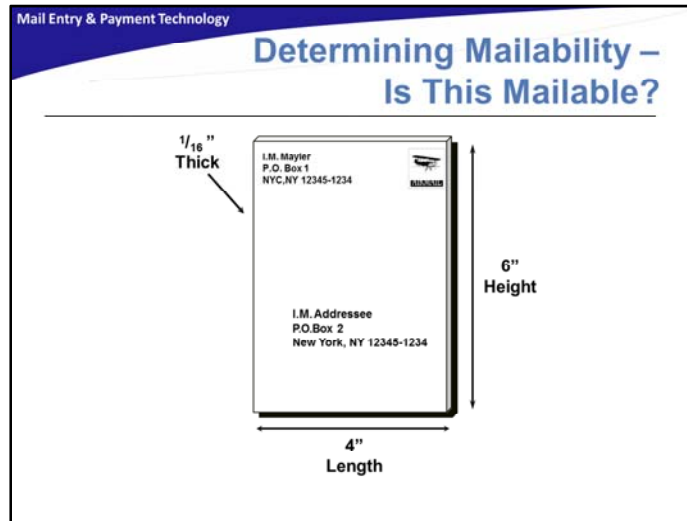
For the purpose of determining mailability on letter mail the *length* is the dimension parallel to the delivery address and the *height* is the dimension perpendicular to the length.

Determining Mailability

- ❑ Nonmailable means that the piece, as designed, is prohibited from the mailstream
- ❑ No fee, surcharge, or additional postage may make a nonmailable item mailable



The placement of the address on a letter-size mailpiece may render a piece nonmailable or nonmachinable. Nonmailable means that the piece, as designed, is prohibited from the mailstream; no fee, surcharge, or additional postage may make a nonmailable item mailable.



If the length (the dimension parallel to the address) of a letter-size mailpiece is not at least 5 inches, it is nonmailable. If the height of a letter-size mailpiece is not at least 3-1/2 inches, it is nonmailable. For example: For a letter-size piece that is 4 inches by 6 inches, if the address is parallel to the 4-inch dimension, it is 4 inches long, which is less than the minimum length of 5 inches and therefore, this piece is nonmailable.

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Now that we have seen how to determine if a piece can be mailed, now let's see how we can determine if the piece falls under the processing category: letter.

Processing Categories - Letters

There are five mail processing categories:

- Letter
- Flat
- Machinable Parcel
- Irregular Parcel
- Nonmachinable Parcel

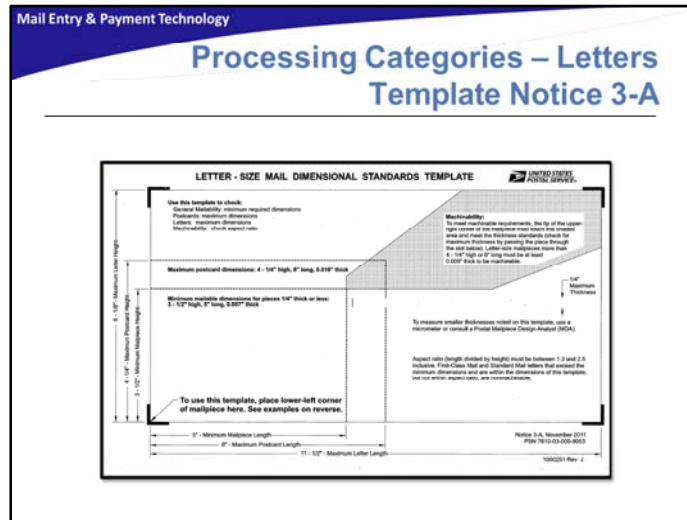
There are five mail processing categories: Letters; Flats; Machinable Parcels; Irregular Parcels and Nonmachinable Parcels. Flats are pieces that exceed letter size and have a maximum size of 15 "long 12" high and $\frac{3}{4}$ "thick. Machinable Parcels - is any piece that is not a letter or a flat and is 6 inches or more long, 3 inches high, $\frac{1}{4}$ "thick and 6 ounces in weight unless it is a lightweight machinable parcel that can be up to 3.5ozs and if it is exactly $\frac{1}{4}$ "thick it needs a minimum height of 3 $\frac{1}{2}$ " and it cannot be more than 27 "long, 17 inches high or 17 inches thick. They cannot weigh more than 25 pounds. As you always know in the DMM regulations you will see some exceptions. • Irregular parcels - these are packages that do not meet the dimensional criteria for machinable parcels or for lightweight machinable parcels. Nonmachinable Parcels - a package that exceeds any of the maximum dimensions of a machinable parcel. Today we will focus on the letter processing category.

Processing Categories - Letters

The processing category is based strictly on the physical dimensions and characteristics of the mailpiece

**Address is
OUT!**

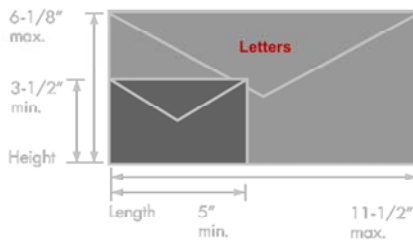
When setting the applicable processing category for a layout, the location of the address does not determine the length and height. The appropriate processing category is based solely on the dimensions and characteristics of the postal item. A good tool for determining the processing category is Notice 3-A.



Place the part on the template. If the part falls within the crop marks regardless of direction orientation and fits through the 1/4" slot, the part is considered letter size. The direction orientation determines whether the part can be mailed, is "machinable" (which can be processed by our machines) or "nonmachinable" (which cannot be processed by our machines).

Processing Categories - Letters

	Minimum	Maximum
Height	3½"	6 1/8"
Length	5"	11½"
Thickness	.007"	.25" (1/4)



To qualify as a letter, pieces must be a minimum size of 3½ inches high by 5 inches long and .007 inches thick, and cannot exceed 6-1 / 8 inches high by 11½ inches long. and ¼ inch thick.

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Next, we will talk about the postal physical standards for machinable / automation letters.

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Machinable/Automation Letters- Definitions

- **Machinable:** Mail that meets standards for successful processing on the Postal Service's high-speed mail processing equipment
- **Automation:** Mail that is machinable and that is 100% barcoded using an Intelligent Mail barcode (IMb) encoded with the correct delivery point routing code
 - All machinable letters have the same physical characteristics required of automation letters except for the barcode

Machinable letters are pieces that meet the standards for successful processing on the Postal Service's high-speed processing equipment. They must have a complete delivery address and cannot weigh more than 3.5 ounces for First-Class Mail or Standard Mail machinable letter prices. If your letter size piece is machinable and has an intelligent or Intelligent mail barcode barcode, encoded with the correct delivery point, it is categorized as "automation". Apart from the IMb, the Machinable and Automation charts share the same characteristics.

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Machinable/Automation Letters – Physical Standards

Dimensions:

	Minimum	Maximum
Height	3 1/2"	6 1/8"
Length	5"	11 1/2"
Thickness*	.007"	1/4"

*Minimum Thickness is .009" inch for letters that are more than 4-1/4 inches high or 6 inches long, or both.

Maximum weight:
3.5 ounces

NOTE
Dimensions & weight for FSM & Booklets are different

The general dimensions of the machinable or automation cards are as follows: Height: Minimum: 3-1 / 2 "inches; Maximum: 6-1 / 8 "inches Length: Minimum: 5" inches; Maximum: 11-1 / 2 "inches Thickness *: Minimum .007" inches; Maximum: 1/4 "inch * But for cards that are longer than 4 1/4" tall or 6 inches long, or both the minimum thickness increases to .009 ". Maximum weight: for cards is 3.5 ounces. Note that the dimensions and weight requirements for a folded letter-size Folded Self mailer and the brochure-style layout are different.

Machinable/Automation Letters – Physical Standards

Heavy Letter Mail:





- ❑ Weight – Over 3 ounces up to 3.5 ounces
- ❑ Prepared in Sealed Envelopes
- ❑ Address Block Barcode
- ❑ No Stiff Enclosures



Heavy letter mail (letter-size pieces over 3 ounces) must be prepared in a sealed envelope, must not contain stiff enclosures, and must have an Intelligent Mail barcode with a routing code in the address block to be eligible for automation prices. Machinable and automation compatible enveloped letters may not exceed 3.5 ounces.

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Machinable/Automation Letters – Physical Standards

<p>Meet the Aspect Ratio Requirement</p>  <p>The length divided by the height must fall between 1.3 to 2.5.</p>	<p>Not be Polybagged, Polywrapped, or enclosed in any plastic material. Staples or saddle stitching may be used only on the bound edge (spine) of booklet style pieces</p> 
<p>Not have clasps, strings, or buttons or contain loose items (keys, coins, etc.)</p> 	<p>Bend easily when subjected to a transport belt tension of 40 pounds around an 11-inch diameter turn</p> 

The “machinable” and “automation” cards must comply with the following physical standards:

- Aspect ratio: the aspect ratio or the “aspect ratio” of the part must be between 1.3 and 2.5 and this is calculated by dividing the length of the part. piece by height
- Wraps and closures: the pieces cannot be wrapped or packed in polyethylene bags or in any plastic material; they cannot have zippers, laces, buttons or similar closure devices; or have protrusions that could impede or damage the mail processing part or equipment
- Staples or binding: can be used only in booklet-style shipments to join the bound edge (the spine of the booklet)
- Rigid and irregularly shaped items: examples of rigid items such as pens, pencils, keys, bottle caps are prohibited). Odd-shaped items such as coins and tokens are allowed if they are firmly attached and wrapped within the content of the piece so that the piece does not lose its shape and can be processed by our automation machines. According to Customer Support Ruling PS - 328, items inserted into a letter that are thicker than a US nickel are considered "nonmachinable."
- “Machinability”: A part and its contents should bend easily when subjected to a 40-pound belt tension

around an 11-inch diameter drum.

- Thickness: For pieces over 4-1 / 4 inches tall or 6 inches long, it must be at least 0.009 inches.

Machinable/Automation Letters – Nonmachinable

Letter-size designs that do not meet our machinable/automation physical standards are considered nonmachinable.

IMPORTANT:
Nonmachinable letters are
subject to either a
nonmachinable surcharge or
nonmachinable prices based on
mail class

A letter-size piece is nonmachinable if it has an exterior surface that is not made of paper or for pieces more than 4-1/4 inches high or 6 inches long does not meet the minimum thickness of 0.009 or if it does not meet the standards in the DMM 201 3.0.

Please note that a mailpiece is also nonmailable if it does not meet the minimum dimensional standards in 1.1.1.

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Now we're going to review the standards for barcode readability.

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Barcode Readability – Reflectance

Automation mailpieces require a mailer applied Intelligent Mail Barcode (IMb)

Envelope Window

Barcode Clear Zone $\pm 0.025 \times 1.000$

Other important Elements:
Background Reflectance
Print Reflectance Difference (PRD)

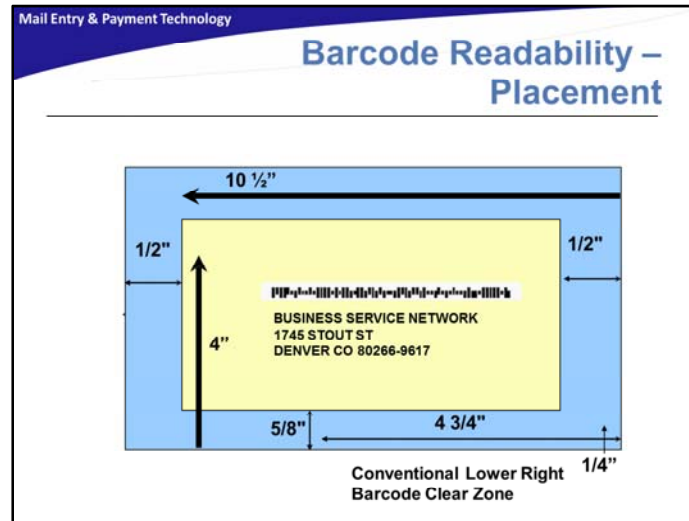
Background Patterns

Opacity

MAX SMART
10605 CARNEGIE AVE
CLEVELAND OH 44106

Dark Fibers

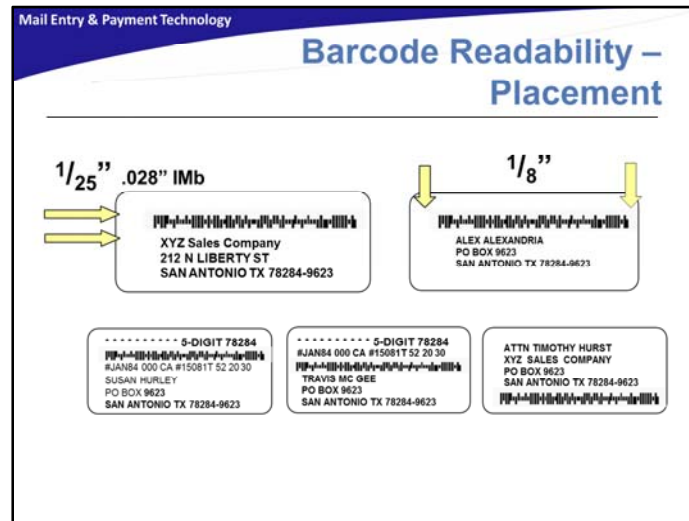
The barcode clear zone and all printing and material in the clear zone must meet the reflectance standards outlined in the DMM 204.13. A background reflectance of at least 50% in the red portion and 45% in the green portion of the optical spectrum must be produced in the following locations when measured with a USPS or USPS-licensed envelope reflectance meter: the barcode clear zone; and the area surrounding the barcode in the address block. A print reflectance difference (PRD) of at least 30% in the red and green portions of the optical spectrum is required between the background material of the mailpiece and the barcode, when measured with a USPS or USPS-licensed envelope reflectance meter.



Each commercial letter-size piece in a machinable price, automation price, or an Enhanced Carrier Route mailing at automation letter prices, must have a barcode clear zone unless the piece bears an Intelligent Mail barcode with a delivery point routing code in the address block. The barcode clear zone is a rectangular area in the lower right corner of the address side of cards and letter-size pieces defined by these boundaries:

- Left: 4-3/4 inches from the right edge of the piece.
- Right: right edge of the piece.
- Top: 5/8 inch from the bottom edge of the piece.
- Bottom: bottom edge of the piece.

When the barcode appears in the address block it must be placed in one of these positions: Above the address line containing the recipient's name; Below the city, state, and ZIP Code line; Above or below the keyline information or Above or below the optional endorsement line.



When the barcode is placed in the address block the rightmost bar must be at least 1/2 inch from the right edge of the mailpiece, and the leftmost bar must be less than 10-1/2 inches from the right edge of the mailpiece and at least 1/2 inch from the left edge of the mailpiece; the top of each bar must be less than 4 inches from the bottom edge of the mailpiece; and the bottom line of the address block, including the barcode, must be at least 5/8 inch from the bottom of the mailpiece.

The minimum clearance between the Intelligent Mail barcode and any information line above or below it within the address block must be at least 0.028 inch. The separation between the barcode and top line or bottom line of the address block must not exceed 0.625 (5/8) inch. The clearance between the leftmost and rightmost bars and any adjacent printing must be at least 0.125 (1/8) inch.

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Barcode Readability – Window Envelopes

Barcode may appear on the piece or on an insert showing through a barcode window

1/8"

0.028"

SCOTT JACKSON
1234 EAST DR
NEW BEDFORD MA 02740-3461

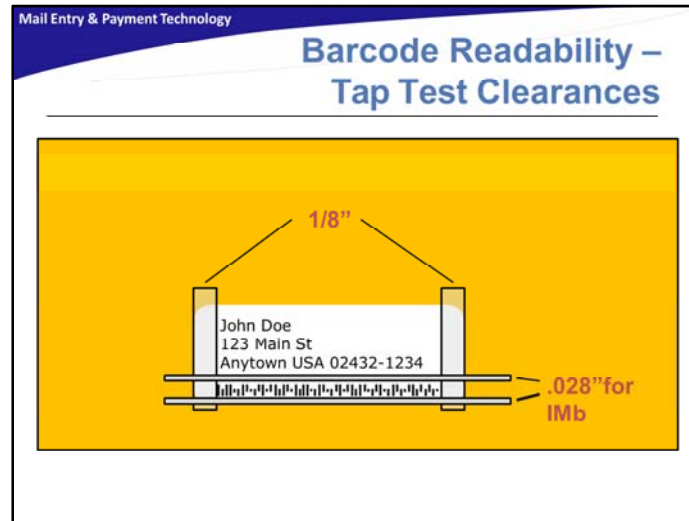
FIRST CLASS
DUPLICATE
POSTAGE
NECESSARY
IF MAILED
IN THE U.S.

SCOTT JACKSON
1234 EAST DR
NEW BEDFORD MA 02740-3461

MAX SMART
85 K ST NW
SAN ANTONIO TX 78284-9623

MAX SMART
85 K ST NW
SAN ANTONIO TX 78284-9623

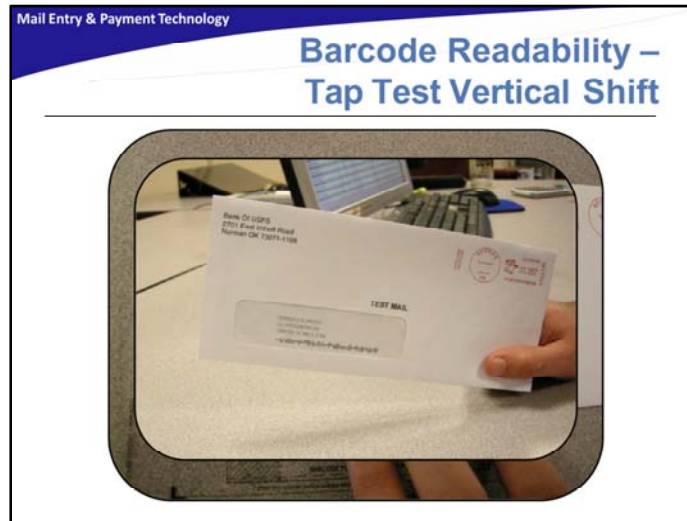
If a window envelope is used, the clearance between the leftmost and rightmost bars and any printing or window edge must be at least 0.125 (1/8) inch. The clearance between the Intelligent Mail barcode and the top and bottom window edges must be at least 0.028 inch. These clearances must be maintained during the insert's range of movement in the envelope. Address block windows on heavy letter mail must be covered.



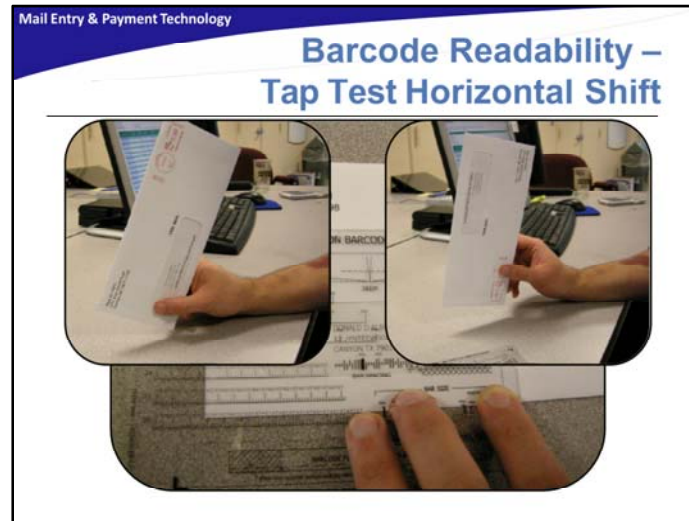
Automation price mailpieces prepared with windows are susceptible to “shift” during transport. To detect shift, which may adversely affect barcode readability, a manual tap test must be performed on all letter-size AND flat-size pieces that have barcodes appearing through windows.

A clear space of at least 1/8 inch is required between the address block, which includes any optional endorsement line, and the top, bottom, and left and right edges of the address window, and must remain when the insert is moved to its full limits in each direction within the envelope to ensure efficient processing and delivery.

The clearance between the Intelligent Mail barcode and the top and bottom edges of the address window and any information line above or below it within the address block must be at least 0.028 inch.



Tap each individual mailpiece twice on a flat horizontal surface on its bottom edge (the edge parallel to the address as read). Check to be sure that a clear space of at least 1/25 inch appears between the top edges of the barcode and the top edge of the window of each piece *without tapping/shaking the mailpiece upside down*. Next, check to ensure that a clear space of at least 1/25 inch appears between the bottom edges of the barcode and the bottom of the window.

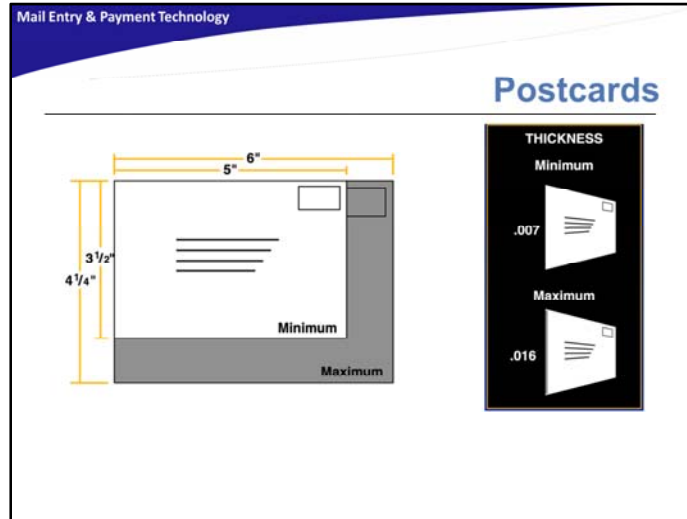


Tap each mailpiece separately on its left and right edges to jog the insert as far left and/or right as possible. Two taps are sufficient. Check to ensure that at least a 1/8 inch clear space appears between the left and right edges of the barcodes and the window's edge, as appropriate.

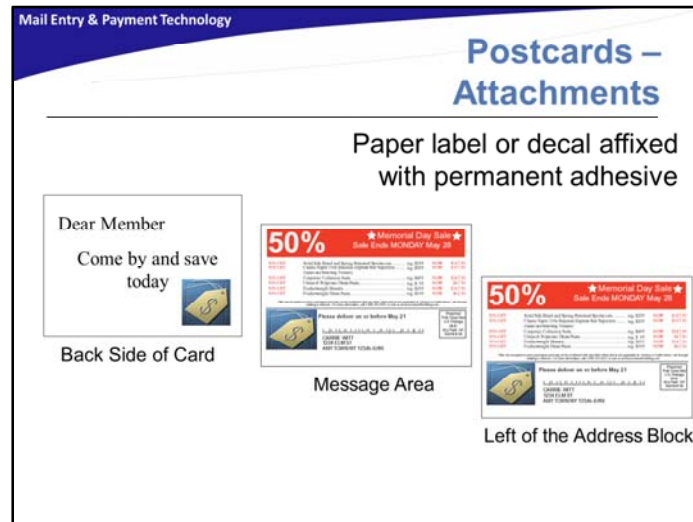
Agenda

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- □ Postcards

Now we're going to review the standards for postcards.



Each card claimed at a card price must be at least 3-1/2 inches high, 5 inches long, and 0.007 inch thick. Post cards claiming card prices may not be more than 4-1/4 inches high, or more than 6 inches long, or greater than 0.016 inch thick. Postcards must be rectangular, with four square corners and parallel opposite sides. Card-size pieces meeting the standards in the DMM 1.2.1 may have finished corners that do not exceed a radius of 0.125 inch (1/8 inch).



A card may bear the following attachments:

- A paper label, such as a wafer seal or decal affixed with permanent adhesive to the back side of the card, or within the message area on the address side or to the left of the address block.
- A label affixed with permanent adhesive for showing the delivery or return address.
- A small reusable seal or decal prepared with pressure-sensitive and nonremovable adhesive that is intended to be removed from the first half of a double card and applied to the reply half.

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Postcards – Vertically Divided

Address, postage and any Postal Service markings must appear on the right side measuring at least 2 1/8" wide (measured from the right edge of the card)

There must be 1/8" clear space around the delivery address

SERVICE PERIOD		METER	
FROM	TO	FILE CODE	POSTAGE
STREET	STREET	STREET	STREET
CITY	CITY	CITY	CITY
STATE	STATE	STATE	STATE
ZIP	ZIP	ZIP	ZIP

DELIVERY ADDRESS

MR. GEORGE CAZ
1234 RIVER RD
ANYTOWN US 08765-4321

RETURN TO SENDER

PLEASE RETURN THIS FLAT RATE MAIL

MR. GEORGE CAZ
1234 RIVER RD
ANYTOWN US 08765-4321

2 1/8"

Vertically divided cards must meet the following standards:



- The address side of the card must be divided into a right portion and a left portion, with or without a vertical rule. The left portion is the message area.
- The delivery address, postage, and any USPS marking or endorsement must appear in the right portion. The right portion must be at least 2-1/8 inches wide (measured from the right edge of the card, top to bottom inclusive).
- For cards claimed at the Presorted price, nondelivery address information may extend into the right portion only above the address block and if the information is shaded or surrounded by a border that has at least 1/8 inch clearance between the delivery address block and the border. Mailers may choose not to shade or border the nondelivery address information if there is at least 1/8 inch of clear space around the delivery address block.
- For cards claimed at the automation price, the standards for automation-compatible mail in [3.0](#), and [202.5.0](#), must be met.

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Postcards – Horizontally Divided

Address, postage and any markings must appear on the portion containing the address and measure at least 1½” high from the top or bottom edge of the card

There must be 1/8” clear space around the delivery address

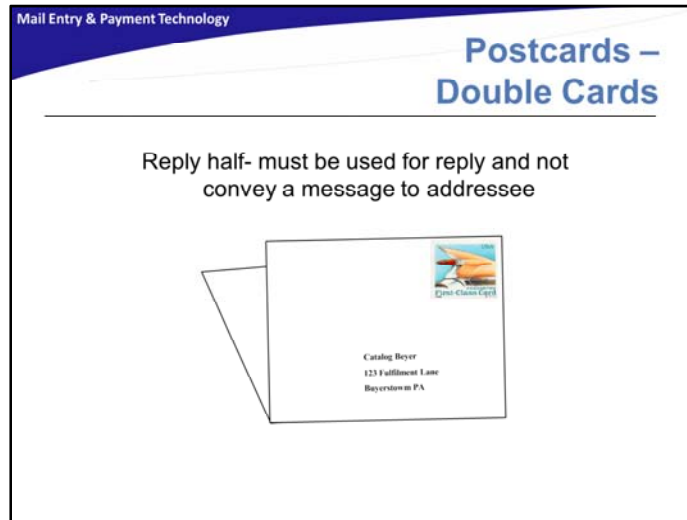



With or without rule

Horizontally divided cards must meet the following standards:

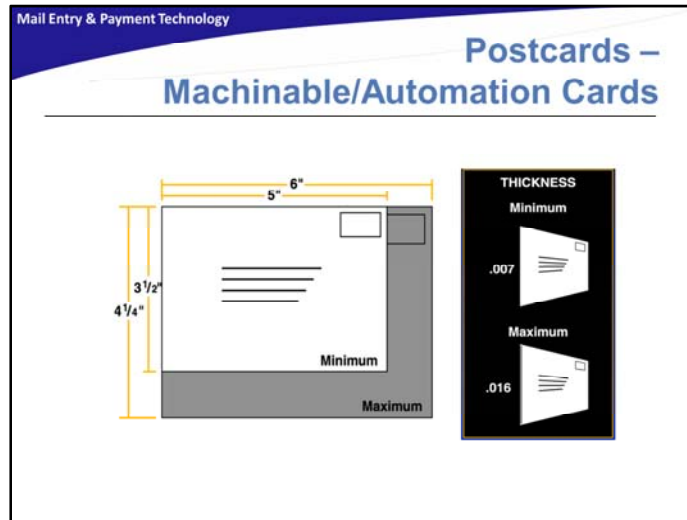
- The address side of the card must be divided into an upper portion and a lower portion, with or without a horizontal rule. The portion of the address side that does not contain the delivery address is the message area.
- The delivery address, postage, and any USPS marking or endorsement must appear within the portion containing the delivery address. As an alternative, when the delivery address appears within the lower portion, it is permissible for the postage, return address, and any USPS marking or endorsement to appear in the upper portion. The portion bearing the delivery address must be at least 1-1/2 inches high (measured from the top or bottom edge of the card, as applicable, right edge to left edge inclusive).
- For cards claimed at the Presorted price, nondelivery address information may extend into the portion containing the delivery address only if it appears above the address block and if the information is shaded or surrounded by a border that has at least 1/8 inch clearance between the delivery address block and the border. Mailers may choose not to shade or border the nondelivery address information if there is at least 1/8 inch of clear space around the delivery address block.

- For cards claimed at the automation price, the standards for automation-compatible mail in [3.0](#), and [202.5.0](#), must be met.



A double card consists of two attached cards, one of which is designed to be detached by the recipient and returned by mail as a single card. Double cards are subject to these standards:

- The reply half of a double card must be used for reply only and may not be used to convey a message to the original addressee or to send statements of account. The reply half may be formatted for response purposes (e.g., contain blocks for completion by the addressee).
- A double card must be folded before mailing and prepared so that the address on the reply half is on the inside when the double card is originally mailed. The address side of the reply half may be prepared as business reply mail, courtesy reply mail, meter reply mail, or as a USPS Returns service label.
- Plain stickers, seals, or a single wire stitch (staple) may be used to fasten the open edge at the top or bottom once the card is folded if affixed so that the inner surfaces of the cards can be readily examined. Fasteners must be affixed according to the applicable preparation requirements for the price claimed. Any sealing on the left and right sides of the cards, no matter the sealing process used, is not permitted.
- The first half of a double card must be detached when the reply half is mailed for return.



Each card claimed at a card price must meet the physical standards outlined in the DMM 201 1.2; additionally any cards claimed at any machinable, automation, or USPS Marketing Mail carrier route price, must meet the standards in the DMM 201 3.0.

MDA SUPPORT CENTER

Contact Information
by phone **855-593-6093**
OR
by email **MDA@USPS.GOV**

**MONDAY – FRIDAY, 7am – 5pm
CST**

ADDITIONAL RESOURCES

Visit our websites at:

www.usps.com

<http://pe.usps.gov/>

Contains the DMM, IMM and various publications.

<https://postalpro.usps.com/>

Contains information on Intelligent Mail, Full Service, eInduction, Seamless Acceptance etc.